

# **Sovereign Debt Problems in Advanced Industrial Countries**

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*-abstract-*

The public finances in the majority of advanced industrial countries are in a worse state today than at any time since the industrial revolution, except for wartime episodes and their immediate aftermaths.

Most of the richest industrial nations (certainly if they are weighted by population size or GDP) are on unsustainable fiscal-financial trajectories. In this paper we are explaining how and why this situation came about, how it is likely to evolve during the rest of this decade by giving some suggestions for possible exit strategies.

In Section 1, we establish that unsustainable public finances are not just an issue for Greece, the other countries of the south-west Euro Area periphery, the Euro Area or the EU. The overall fiscal position of the Euro Area is stronger than that of the UK, Japan and the US. The Italian situation is also stronger than it appears from the recent evolution of the financial markets. We explore the origins of this widespread loss of fiscal control, its scope and some of its unique features.

Section 2 addresses the portfolio of options open to the fiscally challenged countries for restoring fiscal sustainability: fiscal measures, unexpected inflation, economic growth, sovereign debt restructuring.

Section 3 reviews the private (individual country) and social cost-benefit analysis of sovereign default.

Section 4 investigates sovereign default risk in the Euro Area, focusing on Greece and Italy.

The legal, or Treaty-related aspects of a bailout in the Euro Area are reviewed in Section 5.

The implications of the sovereign debt problems of some Euro Area member states for the viability and survival of the EMU are considered in Section 6.

Section 7 discusses the risk of contagion to European EMs.

Section 8 sums up and concludes.

## 1. The unsustainable burden of the Public debt

The world is experiencing **two interrelated crises**:

- i. a **banking crisis**, stemming from losses in capital market securities (including US subprime and other structured products), as well as home-grown, boom-bust problems in the property markets of some countries;
- ii. a **sovereign debt crisis** exacerbated by recession, transfers to help banks, and in some cases very poor fiscal management.

Due to this global financial crisis, the sovereign debt has become a problem to a broad range of countries – from European high-income countries to the poorest states on earth – even after they had obtained debt relief through existing multilateral initiatives.

Some advanced industrialized countries (among them also France and Germany) that are still considered to be in reasonable fiscal-financial condition are so not in absolute terms but only when compared to the truly difficult conditions experienced by the their less “virtuous” peers.

Nerveless in **France** the banking system was recently downgraded and **Germany** (as well as other smaller European economy such as the Netherlands), with its current public fiscal position, would not have been able to join the Euro back in 1999.

**In Table 1, the level of deterioration of the fiscal position is shown for most of the advanced countries.**

**Table 1: Selected countries: Fiscal Data for 2010**

	Gross Debt	Net Debt	Budget Balance % of Nominal GDP	Structural Balance	Cyclical Adjusted Primary Balance
Australia	15,9	-5,7	-0,4	-2,4	-1,1
Canada	82,8	28,6	-4,8	-3,2	-2,4
Czech Rep.	46,5	-0,3	-5,9	-4,2	-3,2
Denmark	45,3	-3,9	-2,7	0,5	0,5
Euro Area	81,8	51,7	-6,1	-3,8	-1,1
Austria	72,9	38,1	-3,4	-3,4	-1,2
Belgium	101,2	81,3	-0,6	-3,3	0,4
Finland	43,7	-52,1	-2,2	1,4	0,8
France	84,5	53,1	-7,5	-6,6	-3,7
Germany	77,4	50,2	-3,3	-2,0	0,3
Greece	114,9	86,1	-13,6	-10,4	-6,0
Ireland	65,8	24,9	-14,3	-8,7	-8,2
Italy	123,6	97,4	-5,3	3,0	1,9
Luxembourg	18,2	-44,6	-0,7	-0,5	-1,1
Netherlands	71,4	30,9	-5,3	-3,6	-1,9
Portugal	83,8	55,6	-9,4	-5,6	-2,8
Slovak rep.	36,7	7,2	-6,8	NA	NA
Slovenia	NA	NA	-5,9	NA	NA
Spain	59,3	33,2	-11,2	-6,6	-5,6
Hungary	85,2	58,8	-0,4	-1,6	2,3
Iceland	117,6	35,4	-15,7	-15,3	-6,5
Japan	189,3	96,5	-7,4	-6,5	-5,6
Korea	33,2	-34,5	-1,8	0,0	0,0
New Zealand	2,7	-14,7	-1,2	0,7	-0,2
Norway	59,9	-140,4	-9,6	-4,4	-7,0
Poland	58,1	25,7	-7,1	-6,8	-4,7
Sweden	52,7	-16,7	-0,5	1,4	1,4
Switzerland	44,4	9,9	-0,7	-0,2	0,3
UK	71,0	46,9	-11,5	-9,2	-6,8
USA	83,9	56,4	-11,2	-8,9	-7,3

Source: Eurostat; OECD

The dramatic truth is that **almost all the Euro area countries does not comply with the Maastricht Treaty**: a debt ratio ceiling of 60% and an annual deficit of 3% both over GDP figure.

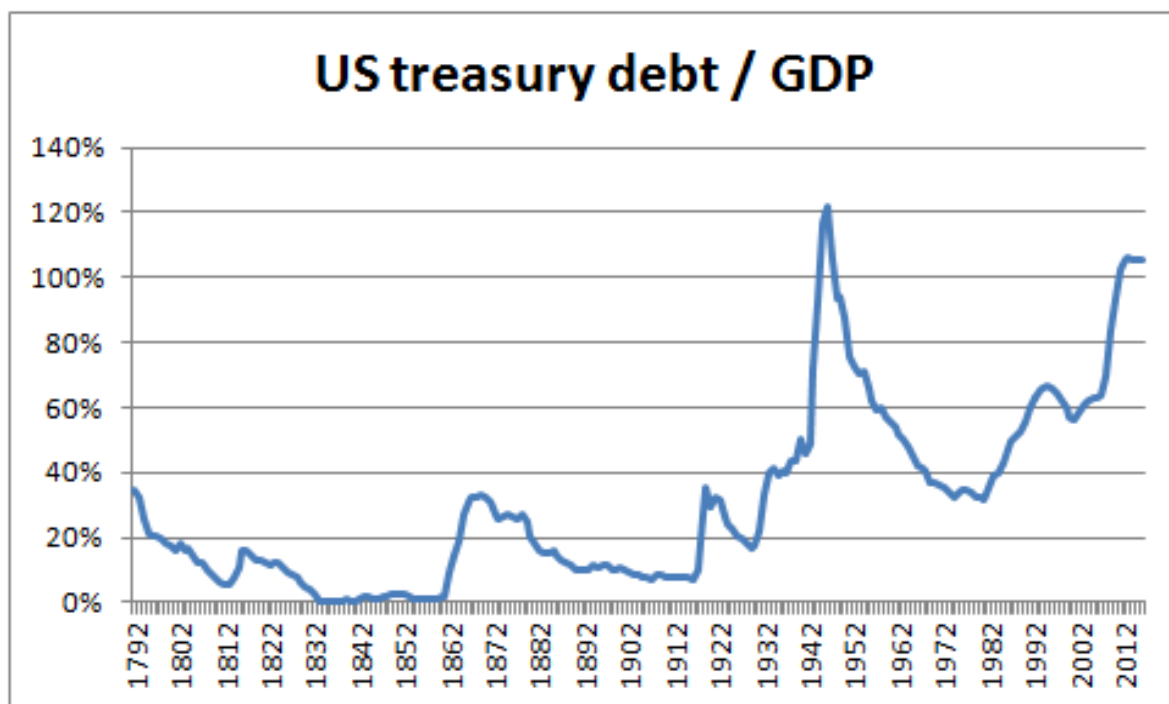
Four **major issues have been identified as the root of this profound fiscal problem**:

- i. The first one, as already mentioned, **derives from the banking crisis**. The bail-outs and other budgetary rescue measures directed at propping up the financial system, had direct financial costs that overheated the financial system triggering the sovereign debt crisis. A clear **example of this vicious process is the role played by the cost of bank bailouts in starting the Irish sovereign debt crisis**.
- ii. The second one is the **consequences of the pro-cyclical behavior of the fiscal authorities** during the boom period between the bursting of the tech bubble at the end of 2000 and the onset of the financial crisis of the North-Atlantic region in August 2007.

- iii. The Third one is an **inheritance of the world-wide recession that started in 2008 and lasted in most of the advanced industrial countries until 2011**. The **recession** weakened many government revenue sources and boosted certain public expenditure categories (like unemployment benefits) for the usual cyclical or automatic fiscal stabilizer reasons.
- iv. The fourth and last one is an **increase in the structural primary (non-interest) deficit**. The long leg of the recession combined with the ending of assets bubbles (mainly the real estate one) and the decrease/normalization of revenues and profits is expected to produce a lasting reduction in the buoyancy of government revenues with respect to GDP.

**All these four conditions are worsening the public finance structure globally and not only in the Euro area** where most of the attention, from media and academia, is focused on. As shown in the figure below, today in US the debt to GDP ratio is reaching level experienced only as a consequence of World war.

Figure 1: US treasury Debt, source USA Treasury dept.



Unless the advanced countries, or at least the “best of the bunch” (US, the UK, France, Japan and even Germany) will not be able to properly address the above mentioned roots to cope to the fiscal crisis, the sovereign debt will continue to be an emergency also for AAA-rate countries in few years from now.

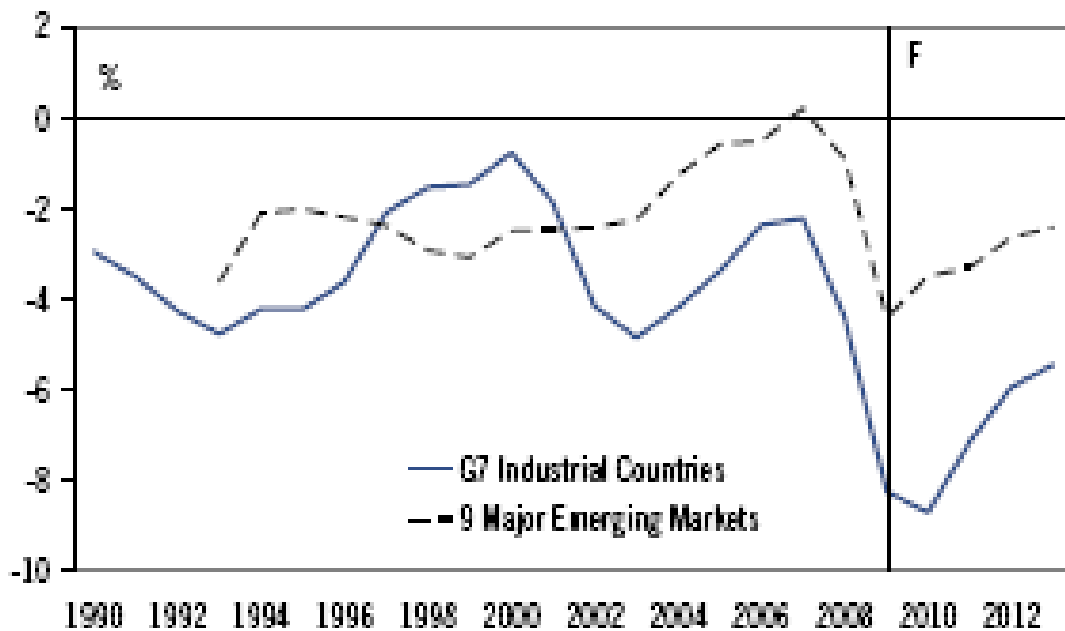
Up to now the fiscal debt crisis seemed to be managed as a ‘pass the baby’ game of excessive sectorial debt or leverage:

1. Excessively indebted households passed part of their debt back to their creditors – the banks.
2. The banks, excessively leveraged and at risk of default, passed part of their debt to the sovereign dept.

3. Finally, the now overly indebted sovereign States are passing the debt back to the households, through higher taxes, lower public spending, the risk of default or the threat of monetization and inflation.

In most of the industrialized countries, these attitude leads to a spectacular deterioration in the fiscal positions, even more so when set against the remarkable fiscal restraint demonstrated by most emerging markets over the same period (not to mention the immediate future effect of the age-related public spending issue that will affect western countries).

Figure 2: Fiscal Deficit as % of GDP. 1990-2013F



Sources: IMF and Citi Investment Research and Analysis

And emerging country are better off not only on deficit but also on overall public debt according the IMF forecasts.

## 2. The possible options for the public debt puzzle

The different number of ways to deal with the national debt crisis are suggested by looking at the simple mathematic of the fiscal adjustment dynamic: a country's public debt will grow continually higher as a percentage of GDP (i.e. will be unsustainable) whenever the primary budget surplus as a share of GDP does not offset the burden of debt service as the economy grows.

In formal writing:

$$\Delta d_t = -pb_t + \frac{(i_t - g_t)}{(1 + g_t)} d_{t-1}$$

Where "d" is public debt (D) as a share of GDP; "pb" is the primary budget balance as a share of GDP (i.e. it excludes debt service); "i" is the effective interest rate on the public debt, "g" is the rate of nominal economic growth and "t" refers to time.

It is clear from the above equation that there are a **set of options available to manage the debt crisis by tuning the preferred variable:**

- **Draconian** (at the end of the day, they are still the cradle of the western culture) **fiscal policy:** increase in taxes and reduction of public spending to bring the budget balance to the point where it offsets the debt-service burden, after allowing for the growth of the economy.
- **Inflation** (unexpected and hateful surprise): the "g" of the equation is the nominal growth of GDP (i.e. the sum of real growth and inflation). Here is the trick then inflation essentially reduces the real burden of the debt.
- **Growth:** increase the real growth of the GDP via structural reforms for a sustainable economy in the long run.
- **Restructuring the level of outstanding debt and bailout:** the effective interest rate can be reduced by renegotiating the terms and conditions of the outstanding debt with the holders or alternatively a haircut to the outstanding stock of debt can be performed so to reduce the debt service burden. Bailout can be interpreted either as a current transfer payment from abroad or a capital transfer from abroad. In general terms one can consider any exogenous disappearance of part or all of the debt as a restructuring or default option.

Unfortunately whereas the available "paths to debt sustainability" are mathematically determinate and easy to be find, their implementation is politically driven and managed. Therefore, in the real world, the decision on which is the due path will be the outcome of a **mediation between different interests**. It is interesting to try to give an overview on which are the pre-conditions or determinants that will make choose each of the above mention options.

**Let's start with inflation. As EU monetary policy is in the hands of the ECB, the possibility of initiating an inflationary policy is not an option for the Euro area.** Were the ECB to carry out quantitative easing to the point where EU-wide inflation accelerated, this would benefit all European debt-service burdens; but it is not an immediate option for the crisis countries within Europe now.

Generally speaking, inflation is a more realistic option where the Central Bank is a weak and not independent authority. Moreover the inflation has to be unexpected in order to have impact on the debt burden and it will have a negative effect on the future credibility (ie level of the interest rate and capability of placing the new debt issues abroad) towards financial markets.

**The growth rate of real GDP is not, unfortunately, a policy instrument.**

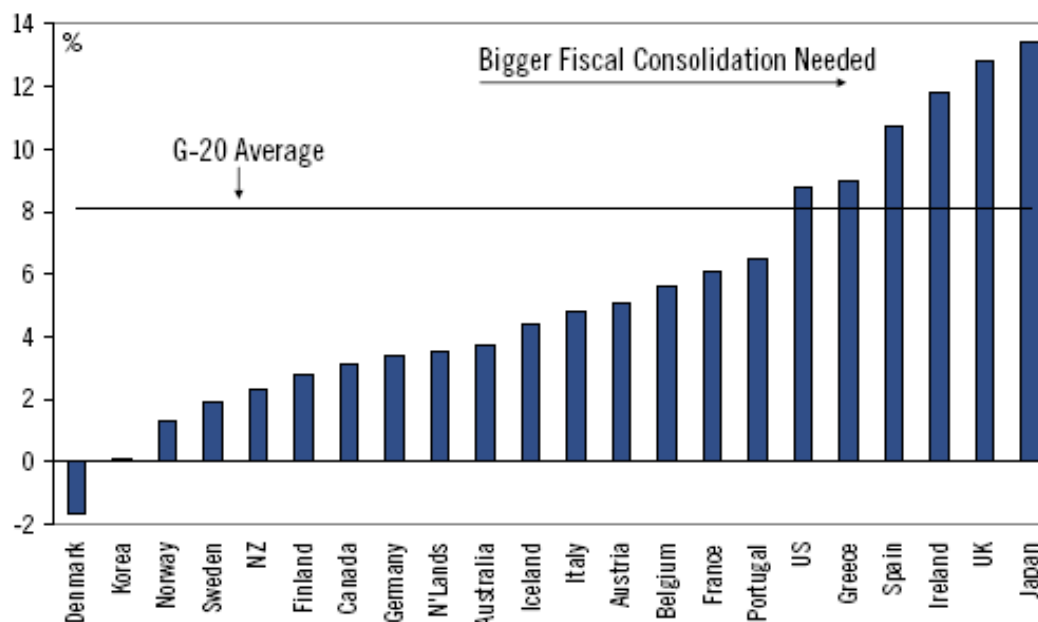
With respect to **structural reform**, the largest preferences go to:

- (a) policies to improve the functioning of labour markets, and the requirement that labour mobility play a key competitiveness adjustment role;
- (b) the reform of pension systems, to ensure they are fully funded, which is essential to reduce the fiscal burden on future generations;
- (c) addressing the structure of competition and the consistency of regulations and governance for improving efficiency and more in general institution's credibility. However, structural reform is likely to be a process the success of which will be measured in decades. The market tolerance for sovereign debt is unlikely to be improved by promises, also because the past behavior suggests that psychologically and politically higher growth also raises the pressures for increased public spending.

For the near term, therefore, the market is focused on budget consolidation: the plausibility of its success, on the one hand, and the temptation to default on the other.

**The projection of the IMF suggest that all advanced countries can restore its fiscal sustainability through a long-term fiscal tightening worth less than 14% of GDP annually, in the worst case for the most fiscally unbalanced country.**

Figure 4: Advanced economies, Fiscal Tightening (%of GDP) needed between 2010-2020 to achieve 60% of GDP public debt ratio by 2030



Note: Primary balance (assumed to improve gradually during 2011-20 and then maintained constant until 2030) improvement needed to stabilize debt at end-2011 level. Japan's target public debt ratio is 80% of GDP. Sources: IMF and Citi Investment Research and Analysis

**This evidence suggests that there is a political inability in identifying a national social choice mechanisms to come up with a fiscal burden sharing scheme that is both fair and efficient.**

The common political practice shows that (in some country more than in others) assigning blame and trying to shift the burden of the fiscal correction (tax increases and public spending cuts) to other groups or individuals takes precedence over searching for timely, fair and efficient retrenchment measures. **The result is that fiscal adjustment is delayed and postponed, making the eventual burden even greater.**

Ironically, fiscal consolidations based on expenditure reforms are the most likely to promote growth, as it is argued by theory and recent studies.

**The lack of less polarized policy, strong institutions and effective leadership will avoid the budget consolidation but also the following economic growth effect as indicated by general economic theory.**

Expectation on the **credibility** of government action is a key element of the so called non-Keynesian fiscal effects: for example, a significant and sustained reduction of government expenditures may lead consumers to assume that this will create room in the medium term for a permanent tax reduction. In that case, an expected increase in permanent income may lead to a rise in private consumption, also generating a better environment for private investment. Moreover, **Blanchard** (1990) and **Sutherland** (1997) demonstrate that a **fiscal consolidation that credibly attempts to reduce public sector spending may produce an induced positive wealth effect, leading to an increase in private**

consumption also through the reduction of the risk premium associated with government debt issuance, which reduces real interest rates and allows the crowding-in of private investment. And finally, from an historic point of view (Giudice, 2007) around half of the fiscal consolidations in the EU in the last 30 years have been followed by higher growth.

### 3. Default and its lither version for restructuring or bailout

**Default is not such an unrealistic option** during national debt crisis as suggested by the study of Reinhart and Rogoff (2009): **sovereign defaults have been common phenomena in the rest of the world. This includes Central and East European nations and the CIS, especially since the fall of the Berlin Wall in 1989.**

When there is a default (a single business as a nation) there is a redistribution of wealth between creditors and debtors. **Ultimately, the beneficiaries of a sovereign default are the tax payers and the current and future beneficiaries of public spending, who would, in the absence of default, bear the burden of servicing the public debt.**

But **there are some side effects** that can offset the immediate benefit.

The main sanction against defaulting sovereign is **temporary exclusion from capital markets**. This means that the more a country will need additional funds in the near future the less probable is it will force a default.

More important when the state itself defaults on its obligations, the rule of law inevitably is harmed. Social capital and trust are destroyed. This is why sovereign defaults tend to occur only in countries that have either been shocked by extraordinary events, often beyond their control, or that are have little social capital, weak and corrupt political institutions and ineffective political leadership.

The **recent default of Argentina** is a good example: besides the economic crisis, characterized by an increasing inflation, the social costs of the default have been enormous. The recovery figure of today is deceptive: economic growth is driven by the price of commodities (agricultural and natural resources) that are determined by international demand (from China and India) and not by high productivity and competitiveness of the Argentinean economy and business sectors.

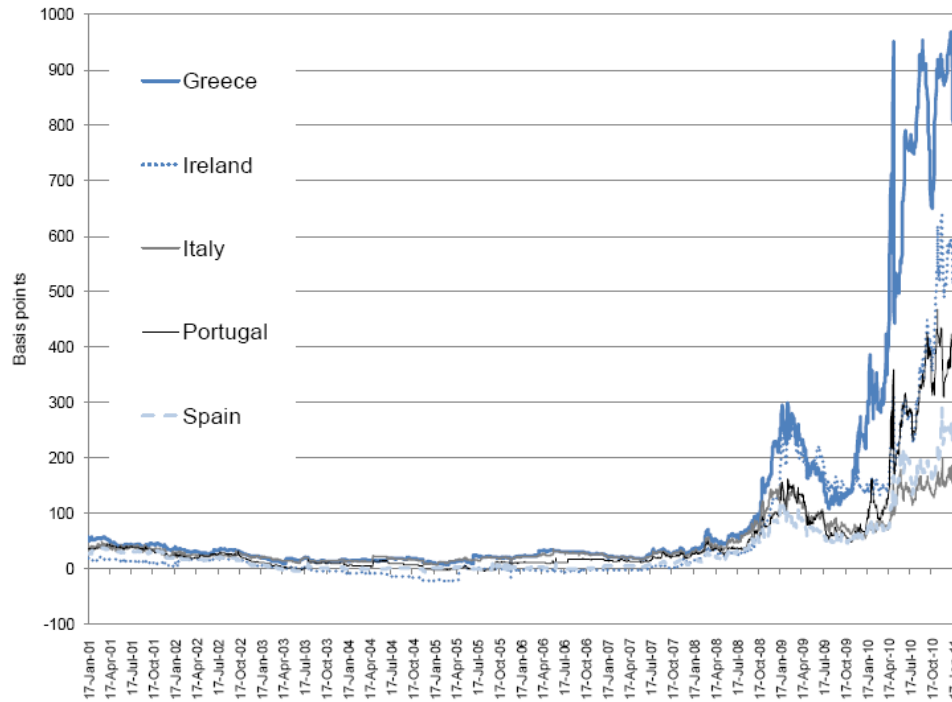
### 4. Euro area and its debt

In the case of **Greece** or any other advanced industrial country, sovereign default is a policy choice, not some exogenous calamity visited on the country. In late 2010, the sovereign debt crisis worsening raised the market concerns about the difficulty of budget consolidation; for the first time, the European Summit in October 2010 discussed the notion that private creditors might have to bear some of the pain via mechanisms being put together to deal with future sovereign-debt crises.

**Ireland and other South European countries (Portugal, Spain , Greece and also Italy)** have faced and are still struggling very significant adverse movements in their yield spreads relative to euro-area benchmark bonds.

The crisis has been so strong that rumors rise on the actual stability of the all Euro area. Markets are concerned that the prospect of very weak growth and high unemployment resulting from fiscal consolidation, and years of painful structural adjustment, will make the temptation to restructure (or default from) sovereign debt too great to be ignored. Of course this concern is immediately transposed over the national bond interest spread, making it more and more difficult to borrow from the market.

Figure5: Bond spreads vs Bund



Source: Datastream, OECD.

The implied market **probability of default** for a sovereign bond can be calculated from yield spreads and a fixed rate of recovery assumption, according the following formula:

$$PD = \frac{(i - i^*)}{(1 - RR + i)}$$

Where the market-implied probability of default (PD) for a sovereign bond can be calculated from the yield on the bond (i), the yield on a risk-free benchmark bond (i\*) (here the German 10-year Bund) and a fixed recovery rate assumption (RR).

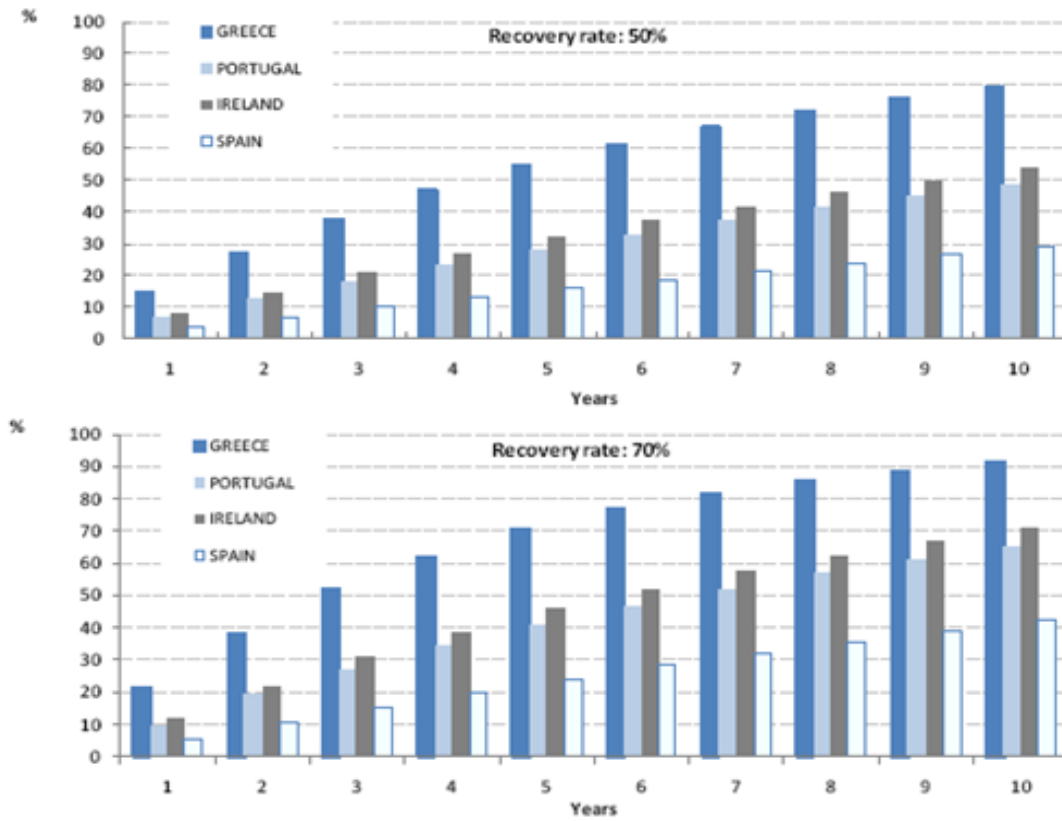
The calculation of the Default/restructuring probability is tricky exercises due to multiple issues: recovery rates cannot be measured in the same way as for a corporate bond because they depend on the ability to tax citizens and service the loans and there is a high political/social cost related to default that makes actual sovereign defaults much fewer than market-driven default probability calculations would indicate.

Nevertheless, these calculations are used widely in official circles: Deutsche Bank (Becker, 2009) calculated the market implied probability of default for Italy, Ireland,

Greece, Spain and Portugal using 5-year and 10-year bonds and recovery rates in the 50%-70% range.

The simplistic Deutsche Bank study calculations are reproduced here below for the four EU periphery countries, which are based on the 50%-70% recovery rate assumptions also used by Deutsche Bank.

**Figure 6** These updated financial market (studies by Deutsche Bank and many others) implied probabilities of default cannot be used to predict absolute default rates in the real world



Source: OECD.

As highlighted above **these calculations cannot be taken as the absolute likelihood of defaults particularly in individual countries. The results of this calculation have to be considered more correctly as signs of extreme market concerns in a world which is not risk-neutral (as the probability calculations assume).** There are more relevant fundamental factors such as major budget financing and banking system issues that have to be taken into consideration, rather than rely on simple market-based surveillance tools.

There are **five conditions** that make sovereign-debt default/restructuring more likely:

1. A **relatively small primary deficit indicates the government has already taken significant steps to eliminate most or all of the primary deficit** – it is living within its means – and going any further is likely to produce unpopular economic hardship.
2. **The larger the initial share, the more likely that the debt service burden in perpetuity will be too high;** this is a permanent burden on taxpayers, and when a

**significant amount of debt is held by foreigners, this represents a real transfer abroad** (and a widening gap between GDP and GNP).

3. **The lower the chances of the government getting a bailout from other countries.**
4. **The lower the need for the government to return to the capital markets for funding** (when support packages are in place), since the markets may refuse to roll over and fund new debt.
5. **The lower the amount of sovereign debt held by domestic banks, since the losses on such debt could add to banking-sector problems.**

**According to these five criteria the OECD performed an analysis of four European countries: Greece, Portugal, Spain and Ireland. We performed it over Italy which, notwithstanding the recent peak of its spread, still present a solid economic fundamentals and room for recovery.**

#### **Market arithmetic for Spain**

At the start of 2010, the Spanish banking system had minimum required capital of around €168bn, and actual capital of €195bn. This suggests a capital buffer of €27bn. Moody's loss estimate (in November 2010) was €176bn, of which they suggest that about half has been recognized. This suggests that Spanish banks would need to raise more capital. Markets are concerned about the possibility that losses could be larger than these estimates due to weakening property prices, including commercial property - an issue that reduces transparency about the true position of banks. At the same time the situation is very heterogeneous, with two large Spanish banks having a large share of the profits and less legacy non-performing loans to deal with, while some of the smaller players may face greater difficulties. At the same time, there is a quite substantial exposure to sovereign debt - a 30% haircut on sovereign debt would add another €63bn to banks' capital needs. According to the fifth criterion concerning the likelihood of sovereign-debt haircuts, discussed above, this would substantially reduce the chance of debt restructuring. This may be one of the reasons that the markets give this possibility a relatively low probability at present.

### **Market arithmetic for Ireland**

The Irish banking sector had minimum required capital of €51bn and actual capital of €63bn at the start of 2010, suggesting a buffer of €12bn. The official estimate for losses (in November 2010) was €85bn.<sup>12</sup>

This amount is large relative to GDP, and the banks' operating profits aren't large enough to cover this over any reasonable period. At the same time, the banks' exposure to sovereign debt is fairly small. In terms of criterion 5 mentioned earlier, this increases the likelihood of a sovereign-debt restructuring, according to market reasoning.

The government has raised the capital requirements of the Bank of Ireland (BOI), Allied Irish (AIB), EBS Building Society and Irish Life and Permanent (ILP) to a new minimum of 10.5% core Tier 1 capital, and over-capitalization of at least 12% by the end of February 2011, in order to cover further potential losses. This compares to the 9.8% on which the required capital is based in Table 3. This suggests on-going risk to the budget with respect to support for the banking system affecting the market assessments of restructuring via the first and second criteria above (the size of the primary deficit and debt as a share of GDP). The market probably believes that, ultimately, the bank debt instruments will need to bear some of the burden of relieving government budget pressures. This may be one of the reasons why some banks' bond prices, too, have begun to fall.

### **Market arithmetic for Greece**

The Greek bank sector had required capital of €23bn at the start of 2010 and actual capital of €31bn, suggesting a buffer for absorbing losses of €8bn. Estimates of bank losses for 2010 are not taken into account, but the exposure to sovereign debt of €61bn means that a 30% haircut would be difficult for banks to absorb. On the fifth criterion, this argues against such a haircut. On the other hand, Greek debt is at the highest level of the four countries considered, and the market gives Greece the highest probability of a restructuring.

### **Market arithmetic for Portugal**

Required and actual capital positions suggest Portuguese banks have no buffer to absorb losses, but bank exposure to periphery sovereign debt is small in aggregate. According to the fifth market criterion, this should increase the likelihood of restructuring in market calculations, on fiscal grounds.

### **Market arithmetic for Italy**

**Italy has been shielded by the recent debt crisis by a relatively tight fiscal policy through the crisis, a comparatively sound banking system, a large domestic investor base for the sovereign debt and relatively low private debt levels. Nevertheless attention has turned to Italy because of its massive government debt market. With debt levels as high as €1.6 trillion, amounting to 120% of GDP, it is the world's third largest bond market after the US and Japan. Italy's refinancing needs over the next 24 months are approximately 25% of the outstanding debt and make it a vulnerable target in a risk-averse environment. And in August 2011 the burden of the highest debt-to-GDP ratio in the Euro Area and the low growth, i.e. a rising debt ratio, have started to deploy its negative effects on bond spread and Italian banks equity value.**

## 5. Bailouts legal aspects

**At the very beginning of the sovereign debt crisis one of the main issue was whereas the existing international treaties and their relationship the national legal frameworks would allow any financial support for a bailout or other financial support action related to sovereign debt crisis.**

The recent evolution of the **Greece crisis, characterized by the financial support from EU and IMF** and the formal statement of the German Constitutional Court in favor of the quantitative easing actions of the European central bank, suggests that both the European and International institution are willing to support the recovery efforts of the countries with fiscal debt crisis. However it is also clear that this financial support will be provided only if it is accompanied by strong budget consolidation actions and structural reforms of the economic framework in the over indebtedness country.

### **The flexibility provisions of the stability and growth pact in time of crisis**

(ECB Occasional Paper No 109; Philipp Rother, pags. 63-65)

The Treaty on the Functioning of the European Union (Lisbon Treaty) and the Stability and Growth Pact (SGP) aim to ensure the sustainability of public finances of Member States.

They require EU countries not to exceed a government deficit ratio of 3% of GDP and a government debt ratio of 60% of GDP and provide procedural steps for the correction of excessive deficits in case one or both of these reference values is breached. Moreover, the so-called preventive arm of the SGP obliges countries to maintain sound budgetary positions. [...] Corrective arm Under the Treaty (Article 126.1), Member States shall avoid excessive government deficits.

In case the 3% of GDP deficit limit is breached, the Commission prepares a report to examine whether the “excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value” (Treaty Article 126.2-3). According to the relevant provisions, “exceptional” can mean an “unusual event outside the control of the Member State” (this could be a financial crisis) or a “severe economic downturn”, including negative real GDP growth or a protracted period of very low output growth relative to its potential (such as in a deep or prolonged recession). In other words, if a country records a deficit slightly above 3% of GDP in a given year due to exceptional circumstances and the excess is foreseen to be reversed in the following year, the country would not have to face the steps under the excessive deficit procedure. In all other cases of a country’s deficit exceeding the 3% of GDP reference value, the (ECOFIN) Council will decide on the existence of an excessive deficit (Treaty Article 126.6).

This was the case in 2009, as the deficits notified by many Member States were neither small nor temporary, even when it was accepted that the crisis circumstances were exceptional. As a result, 13 out of 16 euro area countries were subject to an excessive deficit procedure at the end of 2009 (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Malta, Netherlands, Austria, Portugal, Slovenia and Slovakia).

The Commission report on the existence of an excessive deficit shall take into account “all other relevant factors”, including the medium-term economic and budgetary position of the Member State. While “all other relevant factors” are not specified in detail, countries

are invited to put forward any factor considered relevant. Reference to the financial or economic crisis as a relevant factor did not materially affect the decision on the existence of an excessive deficit in 2009.

In setting the initial deadline for the correction of the excessive deficit (Treaty Article 126.7), the relevant provisions allow the Council in its recommendation to extend the standard time frame of correction in the year after the identification of the excessive deficit, in case there are “special circumstances”; the deadline would then be set as a rule to the second year after the identification of the excessive deficit. The overall assessment of the existence of special circumstances should take into account “all relevant factors” as mentioned above in a balanced manner. [...]

This provision was applied in 2009 for 11 euro area EDP countries (with the exceptions of Greece and Malta) to justify a delayed correction of an excessive deficit on the basis of the argument that additional fiscal tightening in a weak economic environment could prolong the recession. Also when effective action in response to the Council recommendation has been taken and then “unexpected adverse economic events” occur, the deadline for the correction of the excessive deficit may be extended by one year. This provision was applied in December 2009 for Ireland, Spain and France. In the case of Greece, the Council established that the action taken in response to its recommendations has been insufficient (Treaty Article 126.8). In this case, the deadline cannot be extended and the Council moved to the next stage of the EDP procedure of giving notice to Greece (Treaty Article 126.9).

Preventive arm Under the preventive arm of the SGP, EU countries commit to adhere to their country-specific medium-term objectives (MTOs), as specified in cyclically adjusted terms net of one-off and other temporary measures.<sup>3</sup> This should provide a safety margin with respect to the 3% of GDP deficit limit and ensure rapid progress towards fiscal sustainability while allowing room for budgetary manoeuvre, in particular taking into account public investment needs. The annual structural adjustment effort towards the MTO should be higher than the minimum benchmark of 0.5% of GDP in “good times” and could be more limited in “bad times”. Moreover, the Commission may issue policy advice to encourage Member States to stick to the structural adjustment path towards their MTO, as it did in 2008 in the cases of France and Romania.

The focus on the structural budget balance allows countries (in particular those that have already achieved their MTO) to let automatic stabilisers operate freely over the business cycle, while respecting the 3% of GDP deficit limit. This provides room for budgetary manoeuvre to avoid pro-cyclical fiscal policies in particular in bad times. Given the nature and depth of the 2008-09 crisis, however, a precise quantification and interpretation of structural budget balances taking due account of cyclical, one-off and other (such as asset price) effects appears extremely difficult. Thus, it appears somewhat unlikely that in a crisis situation strong policy recommendations could be derived under the preventive arm of the SGP.

Overall, the rules of the Treaty and the SGP provide considerable flexibility to take the effects of the crisis into account in the implementation of the EU fiscal surveillance framework. As a matter of principle, this flexibility must be applied in a prudent and judicious manner in order not to endanger the credibility of the legal provisions.

## 6. Resilience of the Euro Area

**In the European Union of today, it is unlikely that any Member State would chose to exit the Euro Area and autonomously take the default route to reduce the burden of its debt.**

Any country under fiscal stress is much better off within the Euro Area than out of it.

**Assuming that no political power is changed fundamentally and therefore no structural economic reforms are undertaken, leaving the Euro area implies the introduction of a new national currency (New Drachma, say) and this would lead to an immediate sharp nominal and real depreciation of the new currency and an apparent gain in competitiveness, which would not last the blink of an eye because.** Without economic reforms a depreciation of the nominal exchange rate would soon lead to adjustments of domestic costs and prices that would restore the old uncompetitive real equilibrium.

In addition to that it not clear how the outstanding debt in Euro would be managed, its nominal conversion to the new currency and its subsequent decrease of real value due to inflation would be nothing more than a default.

The access to international financial market will be much more expansive because of an exchange risk premium that would be added to the sovereign risk premium. Significant negative impact on the private sector due to the outstanding payment obligation (for both issued debt and commercial transactions) denominated in Euro or other foreign currency.

With these prospective no fiscal weak country would decide to leave the Euro Area also because such an unilateral decision will mean no future financial support from European Central Bank and also the exit from the EU.

The break up scenario change significantly when we take the prospective of a large country with a virtuous fiscal policy and a solid economic fundamentals, ie Germany. Recent events suggest that within Germany there is no a general political consensus on how to manage the current crisis.

**Germany** has two options on one side to support the over indebtedness counties in their recovery effort and helping them in defining a better framework of fiscal policy; on the other side to decide to bail out its banking system that will be strongly affected by a decrease of the value of foreign sovereign debt from weak southern European countries.

Just to give a size to the problem: according to the Bank of International Settlements, German credit institutions alone own government bonds and other claims in the amount of 370.3 billion euro on debtors from Greece, Ireland, Portugal and Spain, the equivalent of more than half of the 750 billion euro of the European rescue scheme.

Moreover an exit of Germany (maybe together with other smaller country such as Finland, Netherlands and Austria) from Euro Area will have a positive effect on the new Mark towards other currencies but this appreciation of the of the new Mark would put at risk the future of German exports.

**The sovereign debt crisis however offer an important opportunity for a change of policy perspective in the Euro Area.**

Taking an overall view, the debt problems of Greece, Ireland and Portugal can be put into perspective.

The Euro Area is a “state” with a common currency, consisting of 17 euro-countries. In 2010, the budget deficit of this “state” was six per cent and its debts amounted to roughly 80% of annual economic output (Eurostat April 2011). The debt level therefore is not a big a problem and threatens neither the creditworthiness of this “state” nor the stability of the euro.

**Italy** has a large debt (120% GNP) and a large spread to German bond (250 basic point, ten times the interest rate) and dramatic lack of reform capacity, but:

- its budget is experiencing an increasing primary balance surplus (in 2011, 15 billion €) up to 97 billion € by 2014 (covering the cost of interest), due to public property dismissions;
- the fiscal measures recently adopted has been well accepted by the European Authorities;
- the banking system seems to be solid enough as it owns essentially national bond and very few Greek bonds;
- the country maintains an high attraction in terms of investment s in real estate and distribution network (Ikea announces a plan to invest 1 bill€ in 14 new centers).

Nevertheless, **the high concentration of debts in relation to GDP of some specific countries poses a political and institutional problem, calling for a European economic policy** with a long-term perspective that is able to define and enforce a common “minimalistic” fiscal policy in Europe.

It is possible to imagine **mutual sovereign risk insurance mechanism** among the Euro Area member states that would not reduce dramatically the political autonomy of the single State as a full fiscal integration would. Of course this insurance mechanism has to be accompanied with tough conditionality attached (including the credible threat that financial support will be withdraw should a borrowing country flout the conditionality) to be the minimum manifestation of EU-wide solidarity and cohesion required to keep EMU politically viable in the medium and long term.

This of course is not an easy task, it implies the creation of a Fiscal Insurance Institution to be financed by all Euro Area countries according to their equity share in the Central Bank (just to provide a solid example with measurable figures) its equity capital has to be massive and in line with the magnitude of the economy of the Euro Area (maybe the equity capital might be just subscribed but not fully paid up front). Then some refinancing mechanisms have to be developed maybe an option is financing via the National Treasury and with the support of the banking system that may also benefit from the insurance coverage.

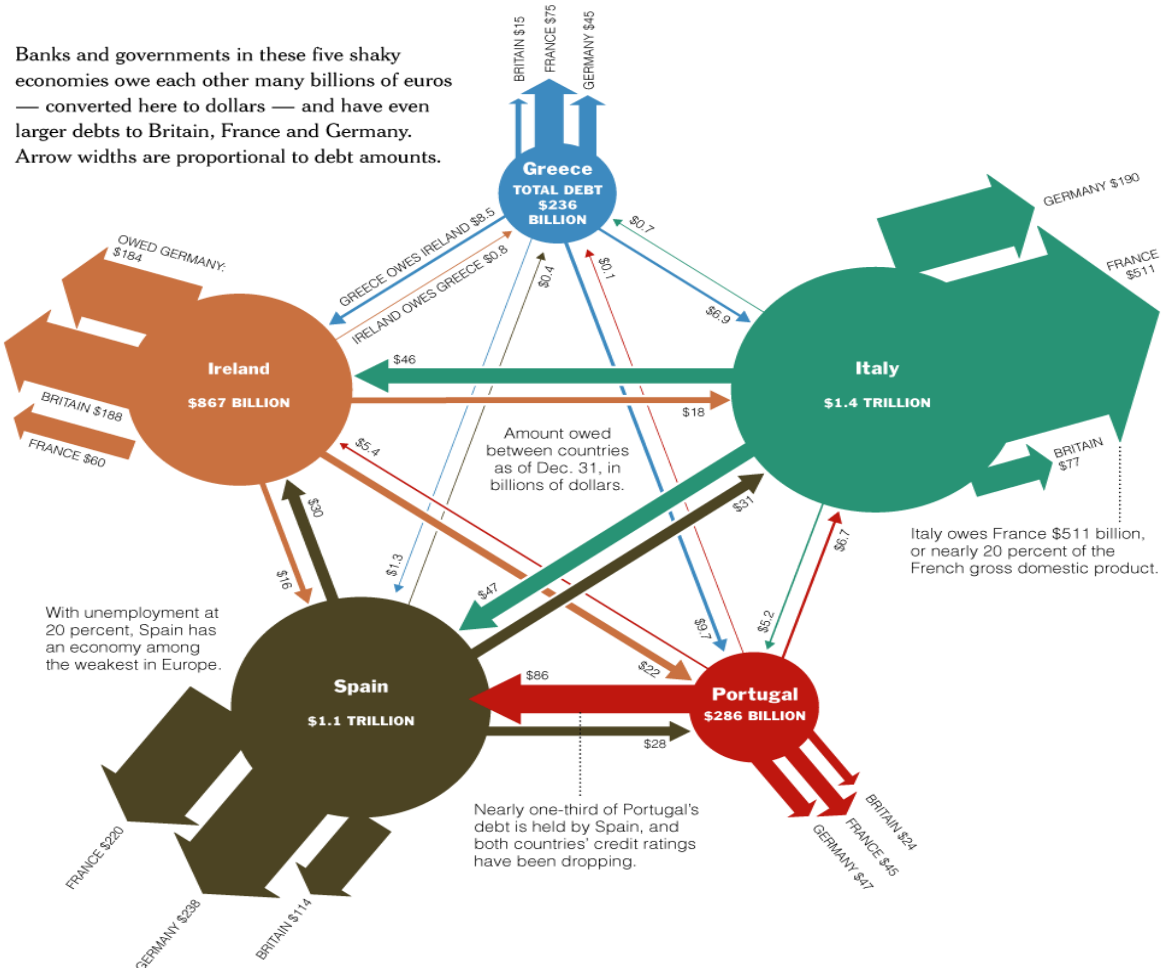
**Another political and economic viable solution might be the Euro Bond but this solution will drive to a larger fiscal integration and a deeper loss of national state independency in order to be credible form the financial market.**

The solutions outlined here, or any other ones, could be realized only if there are actors with a clear vision of a politically unified Europe and ready to subordinate short-term political interests to this goal.

## 7. Risk of contagion

This picture, published on the new York Times may 1<sup>st</sup> 2010, is very powerful in visualizing the possible spreading effect of the debt crisis.

Figure 7: where is the sovereign debt?



In the absence of mitigating policies, a sovereign default or disorderly bank failures could threaten Europe's financial sector and cause liquidity shock with potentially negative global contagion.

Recent empirical studies (Arghyrou and Kontonikas, 2010; Norbert Metiu, 2011) have highlighted how the countries of the Euro Area have been vulnerable to the cross-border contagion of sovereign debt crisis, being the main exporters of sovereign risk were Greece, Ireland, Portugal, and Spain.

**The contagion could spread through the following channels:**

- i. **Financial contagion:** direct exposure to sovereigns and banks at risk of default. According to BIS data, banks are constantly reducing their cross border exposure to sovereign debt. This contagion would hurt the banking system of solid country (Germany and France) because they hold a large share of the debt at risk as well as

the financial system and the overall economy of the smaller countries that have tight economic relationship with the country at risk. An example of this last situation is that if Greek banks lost access to funding that might encourage them to shrink their balance sheets in those countries (Bulgaria and Romania) where they own a large segment of banking sector, putting downward pressure on growth there rather than home.

- ii. **Fiscal contagion:** maybe investors will search for other countries with a fiscal stress similar to the one of Greece, Portugal, Spain and Ireland in other region. An obvious target for deep investigation would be new EU countries coming from the former Warsaw pact (Hungary already had its debt crisis in 2009). But such a contagion might reach also Japan the highest indebtedness country in the world and USA, both countries were recently downgraded by rating agencies.
- iii. **Real contagion:** the debt crisis of the Euro Area may negatively affect the neighborhood non-UE countries that might be deprived of a export-led growth in UE.

There is a general consensus both at EU and IMF level (Euro Area Policies: 2011, IMF Staff Report; The EMU sovereign-debt crisis: Fundamentals, expectations and contagion, (Economic papers n.463, European Commission, 2011, Arghyroua and Kontonikas 2011) in looking at the evolution of the bond pricing mechanism: in the pre-crisis period the bond risk was priced according to the 'convergence trade' hypothesis (all Euro countries took advantage of the German low risk profile) in the post-crisis period markets have been pricing both the international risk factor and individual macro-fundamentals on a country-by-country basis.

**These considerations suggest that to find a solution to the sovereign debt crisis, the focus should be on strong program implementation, with sufficient proceeds from privatization, adequate financing from other official sources on terms supporting debt sustainability, and private sector based solutions to banking problems on a per country base. Moreover there is the need for governments to maintain, or regain, the confidence of markets that they are fully committed to a permanent improvement in macro-fundamentals.**

Such a result can only be achieved through clear evidence of its determined implementation of the **necessary reforms**, even in the face of significant short-term welfare losses, otherwise it is very likely that markets will continue to doubt the sustainability of these countries' long-term participation in the Euro Area, and the risk that these expectations will become self-fulfilling will remain.

At the European Union level, the crisis has highlighted the necessity of **quickly scale up the capacity of fiscal supervision and policy co-ordination and flexibility of the European institutions in order to prevent future debt crises and to prevent its escalation in the affected country and its contagion to other countries.**

## 8. Conclusions

**The sovereign debt crises is resulting from poor budget management, the generalized failure to respect the Maastricht criteria, some spectacular cases of fiscal transfers to support the banking system, and all countries suffering from fiscal deterioration due to the recession. All these factors have led to the worst fiscal stress in Europe after WWII.**

If the Euro Area and the EU, as we know it, is to be maintained, the fiscal issues have to be quickly addressed trying to avoid a recession for countries that are in an unsustainable position.

Among the possible ways to solve the debt sustainability issue the most viable is multi-year program of fiscal tightening and structural economy-wide reform. Credible fiscal policies implementation can restore market confidence and eventually allow long term growth.

At present a unilateral default or an inflation exit strategy, that will lead to an exit from the Euro Area and the EU, is not envisaged for technical issue (the European Central Bank is the most independent monetary authority in the world, it is not clear how to manage the outstanding Euro debt when a country goes back to its national currency).

It is plausible that the European Institution will become more central in the implementation of new fiscal policy either via newly created mechanism/institution or via their augmented credibility and informal authority.

**It is important that the fiscal tightening takes place in proper time and way, in order to avoid spillover effects to the other countries due to an excessive reduction of demand growth in the advanced industrial countries.**

**Importance must be given to:**

- **reduction of debt stock by appropriate fiscal and budget policies (public property dismissions, taxation on large patrimony)**
- **structural reforms (liberalization of public companies in the field of services and other cost-less measures)**
- **strengthening efficiency of national institution (less bureaucracy, legislative system, justice)**

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